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CLAIMS

1. A composition for treating hyperglycemia in a human or non-human animal comprising one or more compounds selected from the group consisting of: fish protein, hydrolysed fish protein and fish protein amino acids.

2. A composition for treating insulin resistance in a human or non-human animal comprising one or more compounds selected from the group consisting of: fish protein, hydrolysed fish protein and fish protein amino acids.

3. A composition as defined in claim 1 or 2, wherein said hyperglycemia and insulin resistance are the result of Type 1 or Type 2 diabetes.

4. A composition as defined in any one of claims 1-3, wherein said fish protein is cod fish protein.

5. A composition as defined in claim 4, further comprising a pharmaceutically-acceptable carrier, adjuvant or vehicle.

6. Use of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids to restore normal insulin function in an insulin-resistant mammal.

7. Use of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids to prevent or treat hyperglycemia.

8. Use of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids to prevent or treat obesity complications, which may include arteriosclerosis, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, hyperglycemia, hypertension and hyperinsulinemia.

9. Use of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids to produce a medicament to restore normal insulin function in an insulin-resistant mammal.

10. Use of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids to produce a medicament to prevent or treat hyperglycemia.

11. Use of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids to produce a medicament to prevent or treat obesity complications, which may include arteriosclerosis, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, hyperglycemia, hypertension and hyperinsulinemia.

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12. A use as defined in any one of claims 6-11, wherein said fish protein is cod fish protein.

13. A method of preventing or treating insulin resistance in a human or non-human animal suffering therefrom, comprising the administration of an effective amount of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids.

14. A method of preventing or treating hyperglycemia in a human or non-human animal, comprising the administration of an effective amount of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids.

15. A method of preventing or treating obesity complications in a human or non-human animal, which may include arteriosclerosis, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, hyperglycemia, hypertension and hyperinsulinemia, comprising the administration of an effective amount of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids.

16. A method of preventing or treating insulin resistance in a human or non-human animal comprising the consumption of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids in a quantity that is about 4% to about 60% of said animal's diet.

17. A method of preventing or treating hyperglycemia in a human or non-human animal comprising the consumption of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids in a quantity that is about 4% to about 60% of said animal's diet.

18. A method of preventing or treating obesity in a human or non-human animal comprising the consumption of one or more compounds selected from the group consisting of fish protein, hydrolysed fish protein and fish protein amino acids in a quantity that is about 4% to about 60% of said animal's diet.

19. A method as defined in claim 13, 14, 16 or 17, wherein said insulin resistance or hyperglycemia is the result of Type 1 or Type 2 diabetes.

20. A method as defined in any one of claims 13-19, wherein said fish protein is cod fish.

21. A method as defined in claim 20, wherein said compounds are combined with a pharmaceutically-acceptable carrier, adjuvant or vehicle.

22. A composition for treating hyperglycemia in a human or non-human animal comprising a mixture of one or more amino acids in the following weight proportion (units of amino acid/100 units of total amino acids): about 6.74 alanine; about 6.29 arginine; about 11.14 aspartic acid; about 16.75 about glutamic acid; about 5.39 glycine; about 2.27 histidine; about 3.24 isoleucine;

about 8.31 leucine; about 1.98 methionine; about 9.41 lysine; about 4.22 phenylalanine; about 4.42 proline; about 5.55 serine; about 4.84 threonine; about 4.31 tyrosine; and about 3.86 valine.

23. A composition for treating insulin resistance in a human or non-human animal comprising a mixture of one or more amino acids in the following weight proportion (units of amino acid/100 units of total amino acids): about 6.74 alanine; about 6.29 arginine; about 11.14 aspartic acid; about 16.75 about glutamic acid; about 5.39 glycine; about 2.27 histidine; about 3.24 isoleucine; about 8.31 leucine; about 1.98 methionine; about 9.41 lysine; about 4.22 phenylalanine; about 4.42 proline; about 5.55 serine; about 4.84 threonine; about 4.31 tyrosine; and about 3.86 valine.

24. A composition as defined in claim 22 or 23, wherein said hyperglycemia and insulin resistance are the result of Type 1 or Type 2 diabetes.

25. A composition as defined in any one of claims 22-24, further comprising a pharmaceutically-acceptable carrier, adjuvant or vehicle.

26. A method of preventing or treating insulin resistance in a human or non-human animal suffering therefrom, comprising the administration of an effective amount of a mixture of one or more amino acids in the following weight proportion (units of amino acid/100 units of total amino acids): about 6.74 alanine; about 6.29 arginine; about 11.14 aspartic acid; about 16.75 about glutamic acid; about 5.39 glycine; about 2.27 histidine; about

3.24 isoleucine; about 8.31 leucine; about 1.98 methionine; about 9.41 lysine; about 4.22 phenylalanine; about 4.42 proline; about 5.55 serine; about 4.84 threonine; about 4.31 tyrosine; and about 3.86 valine.

27. A method of preventing or treating hyperglycemia in a human or non-human animal, comprising the administration of an effective amount of a mixture of one or more amino acids in the following weight proportion (units of amino acid/100 units of total amino acids): about 6.74 alanine; about 6.29 arginine; about 11.14 aspartic acid; about 16.75 about glutamic acid; about 5.39 glycine; about 2.27 histidine; about 3.24 isoleucine; about 8.31 leucine; about 1.98 methionine; about 9.41 lysine; about 4.22 phenylalanine; about 4.42 proline; about 5.55 serine; about 4.84 threonine; about 4.31 tyrosine; and about 3.86 valine.

28. A method of preventing or treating obesity complications in a human or non-human animal, which may include arteriosclerosis, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, hyperglycemia, hypertension and hyperinsulinemia, comprising the administration of an effective amount of a mixture of one or more amino acids in the following weight proportion (units of amino acid/100 units of total amino acids): about 6.74 alanine; about 6.29 arginine; about 11.14 aspartic acid; about 16.75 about glutamic acid; about 5.39 glycine; about 2.27 histidine; about 3.24 isoleucine; about 8.31 leucine; about 1.98 methionine; about 9.41 lysine; about 4.22 phenylalanine; about

4.42 proline; about 5.55 serine; about 4.84 threonine; about 4.31 tyrosine; and about 3.86 valine.

29. A method as defined in claim 26, 27 or 28, wherein said insulin resistance or hyperglycemia is the result of Type 1 or Type 2 diabetes.

30. A method as defined in claim 29, wherein said compounds are combined with a pharmaceutically-acceptable carrier, adjuvant or vehicle.